Amendment to the Claims

In the Claims:

Please cancel Claims 1-26, 47-56 and 63 and amend Claims 27, 39, 40 and 57 as follows:

1. – 26. (Canceled)

27. (Currently Amended) A device comprising:

an impaction plate,

a planar collection surface on the impaction plate,

a spotting nozzle for directing an air stream towards the collection surface, whereby impact of the air stream on the surface forms a spot of airborne particles on the collection surface,

an analyzer configured to analyze the particles while the particles are retained on the collection surface,

a surface regenerator for regenerating the collection surface such that particles collected before regenerating the collection surface are substantially no longer present to contaminate a spot of particles collected after regenerating the collection surface, and

a homing sensor, wherein the homing sensor is ~~capable~~ configured to cyclically ~~position~~ move the collection surface ~~sequentially from the nozzle to the analyzer and to the surface regenerator~~ relative to the nozzle, the analyzer, and the surface regenerator, movement of the collection surface being controlled such that in each successive cycle a first portion of the collection surface will initially be adjacent to the nozzle, then adjacent to the analyzer, then adjacent to the surface regenerator, and then adjacent to the nozzle once again in a subsequent cycle.

28. (Original) The device according to claim 27 wherein the collection surface is smooth.

29. (Original) The device according to claim 27 wherein the spot is enriched in particles of 1-10 μm size range.

30. (Original) The device according to claim 27 wherein the analyzer is a fluorescence detector.

31. (Original) The device according to claim 27 wherein the analyzer is an infrared absorbance detector.

32. (Original) The device according to claim 27 wherein the analyzer is a mass spectrometer.

33. (Original) The device according to claim 27 wherein the analyzer is a surface enhanced Raman spectrometer.

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600 - 108th Avenue N.E., Suite 507
Bellevue, Washington 98004
Telephone: (425) 688-8816 Fax: (425) 646-6314

34. (Original) The device according to claim 27 wherein the surface regenerator is a felt wheel.

35. (Original) The device according to claim 27 wherein the impaction plate comprises a plurality of collection surfaces.

36. (Original) The device according to claim 27 further comprising at least one particle concentrator upstream of the nozzle.

37. (Original) The device according to claim 27 further comprising a size selective inlet upstream of the nozzle.

38. (Original) The device according to claim 27 wherein the impaction plate is a lobed cam having a shaft, the impaction plate comprises at least one planar collection surface substantially parallel to the shaft, and the homing sensor comprises the shaft.

39. (Currently Amended) A device comprising:

an impaction plate,

a planar collection surface on the impaction plate,

a spotting nozzle for directing an air stream towards the collection surface, whereby impact of the air stream on the surface forms a spot of airborne particles on the collection surface,

means for analyzing the ~~spot~~ particles while the particles are retained on the collection surface,

means for regenerating the collection surface such that particles collected before regenerating the collection surface are substantially no longer present to contaminate a spot of particles collected after regenerating the collection surface, and

means for translocating the collection surface relative to the nozzle, the analyzer, and the surface regenerator.

40. (Currently Amended) The device according to claim 39 wherein the means of analyzing the spot is selected ~~form~~ from the group consisting of means for measuring biological, chemical, and radiological properties.

41. (Original) The device according to claim 39 wherein the means of analyzing the spot is a fluorescence detector.

42. (Original) The device according to claim 39 wherein the means for regenerating the collection surface comprises a felt pad.

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600 - 108th Avenue N.E., Suite 507
Bellevue, Washington 98004
Telephone: (425) 688-8816 Fax: (425) 646-6314

43. (Original) The device according to claim 39 wherein the means for translocating the collection surface comprises a shaft attached to the impaction plate, wherein rotation of the shaft at predetermined angles operatively positions the collection surface to the spotting nozzle, the means for analyzing the spot, and the means for regenerating the collection surface.

44. (Original) The device according to claim 39 further comprising at least one particle concentrator upstream of the nozzle.

45. (Original) The device according to claim 39 further comprising a size selective inlet upstream of the nozzle.

46. (Original) The device according to claim 39 wherein the impaction plate is a lobed cam having a shaft, the impaction plate comprises at least one planar collection surface substantially parallel to the shaft, and the means of translocating comprises the shaft.

47. – 56. (Canceled)

57. (Currently Amended) A device comprising:

an impaction plate,

a planar collection surface on the impaction plate,

a nozzle for directing an air stream towards the collection surface, whereby impact of the air stream on the surface forms a spot of airborne particles on the collection surface,

a pre-analysis spot preparation station,

an analyzer for examining the ~~spot~~ particles while the particles are retained on the collection surface,

a surface regenerator capable of removing the deposit from the surface after analysis such that particles collected before regenerating the collection surface are substantially no longer present to contaminate a spot of particles collected after regenerating the collection surface, and

a homing sensor, wherein the homing sensor is ~~capable~~ configured to operatively position the collection surface relative to the nozzle, the analyzer, and the surface regenerator.

58. (Original) The device according to claim 57 wherein the surface comprises pyramid-shaped structures of about 1-10 μm in height and width.

59. (Original) The device according to claim 57 wherein the surface regenerator comprises a regenerator nozzle for blowing air towards the collection surface.

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600 - 108th Avenue N.E., Suite 507
Bellevue, Washington 98004
Telephone: (425) 688-8816 Fax: (425) 646-6314

60. (Original) The device according to claim 57 wherein the impaction plate is a lobed cam having a shaft, the impaction plate comprises at least one planar collection surface substantially parallel to the shaft, and the homing sensor comprises the shaft.

61. (Original) The device according to claim 57 further comprising at least one particle concentrator upstream of the nozzle.

62. (Original) The device according to claim 57 further comprising a size selective inlet upstream of the nozzle.

63. (Canceled)

LAW OFFICES OF RONALD M. ANDERSON
600 - 108th Avenue N.E., Suite 507
Bellevue, Washington 98004
Telephone: (425) 688-8816 Fax: (425) 646-6314